



# FACT SHEET



BMDO FACT SHEET 202-00-11

Replaces Fact Sheet 202-00-07

## ***NAVY THEATER WIDE BALLISTIC MISSILE DEFENSE***

### **BACKGROUND**

The Navy Theater Wide (NTW) Theater Ballistic Missile Defense (TBMD) System is being designed to provide an exoatmospheric (above the atmosphere) theater ballistic missile defense capability from AEGIS Weapon System (AWS) equipped U.S. Navy surface combatants. The NTW system will provide an intercept capability against medium and long-range theater ballistic missiles (TBM):

- Near the enemy TBM launch site to effect ascent phase intercepts;
- Along the TBM trajectory as it passes over water or along the coast to effect midcourse intercepts;
- Near the defended area to provide descent phase intercepts to achieve an additional layer of defense for lower tier systems.

NTW will be able to take advantage of the mobility of Navy AEGIS equipped ships and provide BMD protection to U.S. and coalition forces throughout the world. This is especially important in the early stages of a conflict when land-based BMD assets are either unavailable or limited in number or location. Additionally, because the NTW capability will arrive on-station as part of AEGIS equipped combatants integrated warfighting capability, there will be a significant reduction placed on the demands for airlift and sealift platforms to deliver land-based BMD assets. This will free them for other logistical priorities during U.S. and coalition force build-up.



**STANDARD Missile launch from  
the AEGIS Cruiser *USS Shiloh* (CG-67).**

### **NTW BLOCK PROGRAM DESCRIPTION**

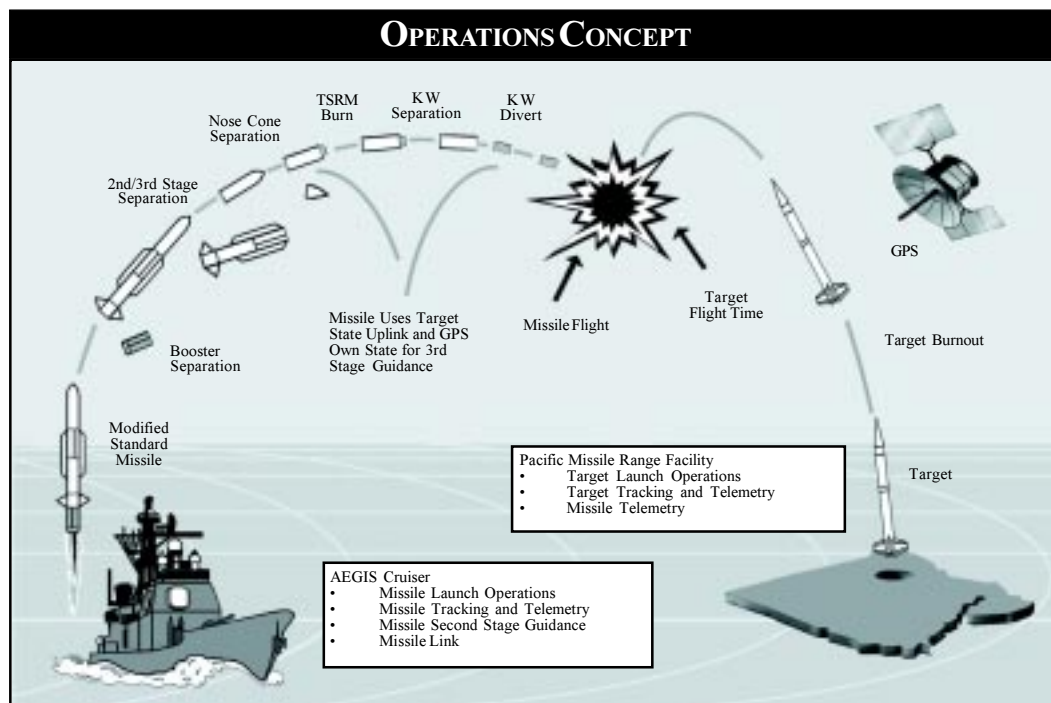
The Navy will pursue developmental increments of the NTW Block I system in order to provide the warfighter with vital TAMD capability that evolves toward the Block II objective system using an evolutionary acquisition strategy. NTW will deliver the initial Block I capability in successive increments, Blocks IA, IB, and IC. Block IA would be a contingency capability only, followed by Block IB providing an NTW single mission capability with a fully Operational Requirements Document (ORD)-compliant multi-mission capability incorporated into the Block IC.

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## NTW BLOCK PROGRAM DESCRIPTION (CONTINUED)

NTW-equipped ships will receive the following modifications: Synthetic Wideband High Range Resolution and Common Signal Processor modifications to the AN/SPY-1 Radar; an upgraded NTW AEGIS computer program baseline; and STANDARD Missile 3 (SM-3) Block I missiles for the Vertical Launching System (VLS). The SM-3's will incorporate a dual pulse Third Stage Rocket Motor (TSRM); a Third Stage Guidance Section; and a Kinetic Warhead protected by a removable Composite Nosecone.

## PROGRAM STATUS



The Ballistic Missile Defense Organization (BMDO) and its Executing Agent, the Navy Program Executive Office for Theater Surface Combatants (PEO (TSC)), are working in partnership to develop and rapidly deploy sea-based TBMD programs that satisfy the present and future operational requirements of our warfighters.

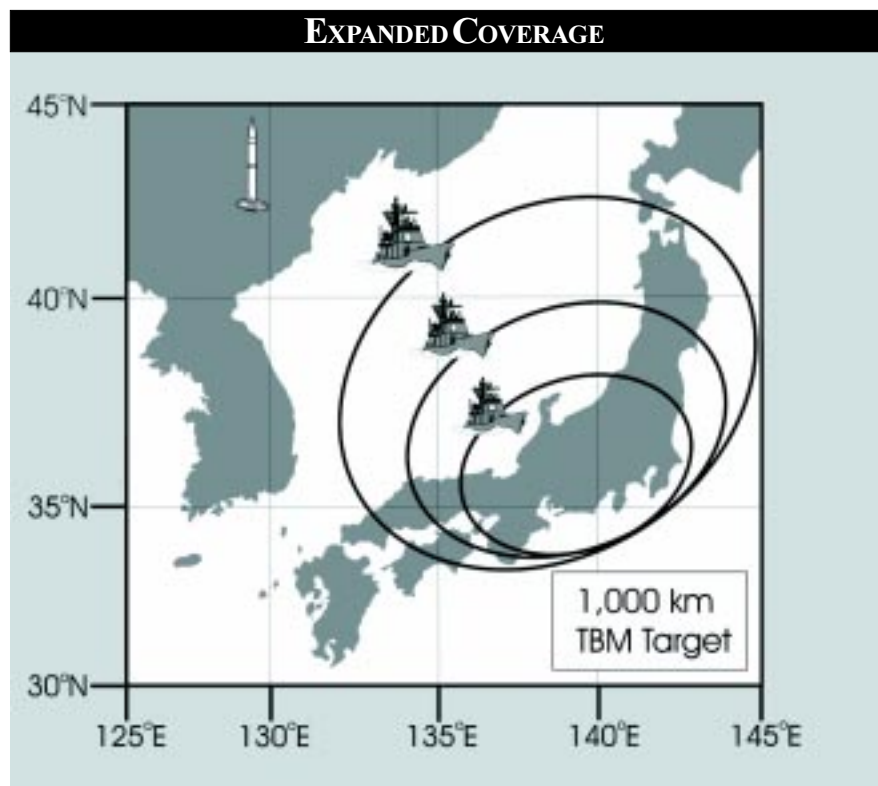
The NTW Program builds upon the previous successes of the Navy Area lower-tier TBMD Program, the Standard Missile (SM-2) Block IVA, the 1992-1995 Navy TERRIER Missile/Light Exoatmospheric Projectile (LEAP) flight demonstration, and recent modifications to the AEGIS Weapon System.

The initial NTW flight demonstration phase is the AEGIS LEAP Intercept (ALI) flight test series. ALI, a series of nine total tests to be completed between FY99 and FY02, will test the four phases of the SM-3's flight: first-stage boost, second stage endoatmospheric flight, exo-atmospheric midcourse flight, and third-stage/KW separation and guidance, leading to intercepts of TBM targets during various stages of their trajectories. These flight demonstration events will be followed by a series of more stressing threat representative test shots prior to fielding the tactical system.

Separate from ALI are a number of risk reduction activities (RRAs) in the areas of lethality, discrimination, propulsion, divert, KW sensor, ship systems, BMC3I, and system engineering. These RRAs will be integrated into the NTW program as it matures.

In order to properly manage the complexities in fielding such a unique and sophisticated TBMD capability in the most expedient, yet cost-effective manner possible, the NTW program capitalizes on recent DOD directed Acquisition Reform Initiatives and the Integrated Product Team (IPT) process. In November 2000, The NTW program underwent a Program Review to obtain DoD Review Progress approval of the current program. Further review of the program's evolutionary path is still underway.

## PROGRAM STATUS (CONTINUED)



*The Navy Theater Wide (NTW) concept capitalizes on the inherent mobility offered by Navy ships. By positioning a ship closer to the threat launch point, a significant increase in the defended area can be realized.*

## COMMAND AND CONTROL

The Navy has years of experience with Battle Force air defense and has already deployed the command and control systems necessary to support initial TBM defense from the sea. The ability to integrate satellite communications, the Joint Tactical Information Distribution System (JTIDS), Tactical Related Applications/Tactical Receive Equipment (TRAP/TRE), Naval Tactical Command System-Afloat (NTCS-A), and the complementary ability to incorporate other emerging intelligence, sensor, and tactical information systems make the Navy a logical choice for the TBMD mission.

## NAVY TACTICAL BALLISTIC MISSILE DEFENSE STRATEGY

- **Evolve the AEGIS fleet through modernization**
  - **Preserve multi-mission system integrity**
  - **Add ballistic missile defense capability and maintain existing cruise missile capability**
- **Deploy Navy Area Defense capability as quickly as possible**
- **Continue AEGIS evolution to add Navy Theater Wide capability**
- **Introduce enhancements to pace threat evolution**

## ACQUISITION AND CONGRESSIONAL SUPPLEMENTS

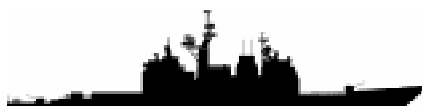
The Navy Theater Wide looks to pursue an acquisition strategy to pace the evolving ballistic missile threat. The acquisition program's goals are to: Evolve the AEGIS Weapon System, the Vertical Launching System, and the STANDARD Missile.

NTW Requirements	FY99	FY00	FY01	FY02	FY03	FY04	FY05
<i>\$ millions</i>	366	376	383	287	214	247	430

In addition, over the past five years, Congress has repeatedly increased Navy Theater Wide Funding.

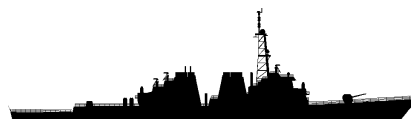
Congressional Supplements	FY96	FY97	FY98	FY99	FY00	FY01
<i>\$ millions</i>	170	246	215	148	50	80

## AEGIS SHIPS



**TICONDEROGA CLASS  
GUIDED MISSILE CRUISER  
(AEGIS) (CG)**

**Displacement:** 9450 Tons  
**Dimensions:** Length - 567 ft  
 Width - 55 ft  
**Speed:** 30+ knots



**ARLEIGH BURKE CLASS  
GUIDED MISSILE DESTROYER  
(AEGIS) (DDG)**

**Displacement:** 9200 Tons  
**Dimensions:** Length - 509 ft  
 Width - 66 ft  
**Speed:** 32+ knots

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